

The life of a threatened species officer

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Introduction

When I completed my Environmental Science degree, my career aspirations could be summed up as “wanting to make a difference”. Unfortunately, after numerous rejections from prospective employers, I realised that I had no idea how to achieve this broad ambition and had limited practical skills with which to do so. But, after spending time as a tea-lady, waitress, secretary and environmental consultant, I ended up working for the NSW National Parks and Wildlife Service (now Department of Environment and Climate Change (DECC)) as a Threatened Species Officer. While my ambitions have become a little more specific over time, I am now extremely fortunate to be in a position where I am directly involved in the conservation of threatened species.

This paper outlines some of my experiences working at the interface of conservation science, management and policy as a threatened species officer in the NSW Government over the past 5 years. I discuss the practical implications of policy development within a large conservation agency and provide some advice for aspiring threatened species officers.

Background

Threatened species conservation requires knowledge of both conservation biology and conservation policy. Around the world, threatened species are the focus of specific legislation and regulations in recognition of their high risk of extinction (Possingham *et al* 2002). Within NSW, the *Threatened Species Conservation Act 1995* (TSC Act) is the overarching piece of legislation relevant to threatened species issues. The interaction of the TSC Act with several other state and Commonwealth Acts governs the way in which threatened species are addressed by the NSW Government. Currently, there are over 1000 threatened species, populations and ecological communities listed under the TSC Act.

The Department of Environment and Climate Change (DECC) is the agency which administers the TSC Act and leads the conservation of threatened species in NSW (DEC 2006a). My job involves the formulation of policies and guidelines relevant to threatened species conservation across NSW, as well as the coordination and delivery of threatened species recovery programs. I am one of about 50 Threatened Species Officers within DECC. My position is within the Head Office in Sydney, with other positions based throughout the State in Hurstville (Sydney), Queanbeyan, Griffith, Albury, Dubbo, Armidale, Newcastle and Coffs Harbour.

What do I actually do?

The work undertaken by my colleagues and I can be divided into three broad categories:

1. preparation of statewide policies, guidelines and programs to implement the Government’s conservation agenda. Examples range from writing and amending legislation to developing software packages to assess the impact of clearing on biodiversity;
2. developing and implementing recovery programs for threatened species, including the writing of recovery plans, undertaking recovery projects and working with other parties who have an interest in a particular species; and
3. initiating or responding to a particular issue, for example preparing briefings for senior management on matters related to threatened species.

Each of these categories involves synthesising up-to-date scientific information to inform government policy or conservation management activities.

Policy Development

Policy development is the process by which decisions made by politicians are implemented (Kingsford 2007). Policy development occurs constantly in most parts of DECC and there is a policy to direct most activities of the agency. Policy development is largely undertaken by policy officers who work throughout the organisation on subjects as diverse as radiation, contaminated lands, climate change and threatened species. All Commonwealth and State government agencies employ policy officers.

While policy development may sound as exciting as watching paint dry, it lays the foundation for most other activities undertaken by government agencies and their stakeholders. Working as a policy officer means you really are able to “make a difference”to some extent sometimes.

A Government generally translates its broad policy on a topic into a piece of legislation which in turn directs the activities of the agencies responsible for implementing that legislation. Policy officers are usually involved in the preparation of legislation, and this is considered to be ‘high-level’ policy development (or, as some say, “big P” policy).

Policy positions fall into two main categories:

1. those who deal with a particular level of government or government processes, but all manner of policy issues within a Department; and
2. those who have expertise in a particular area and undertake work on all manner of topics that relate to that particular area, such as threatened species conservation. While these positions are classified as ‘policy positions’, they can also undertake conservation management projects and/or research.

These two types of policy work are quite different. The first type of policy officer (generally more senior) usually becomes involved at the final stages of a policy project when high-level political negotiations are involved or legislation needs amending. The latter type of policy officer, of which I was one, will often initiate and manage a project relevant to their particular work area. Examples of the types of policies that a policy officer in DECC might work on include policies on land acquisition for the reserve system, policies on park management eg fire-fighting and commercial activities, policies on private and public forestry activities, policies on water management, and policies on threatened species conservation eg translocation and impact assessment.

Policy work is generally undertaken within the government sector and can have a reputation for being the domain of "desk jockeys". However, in my experience, the most effective policy officers are those who have a strong scientific background coupled with practical experience. The primary requirement of policy work is to be able to analyse a problem and negotiate a solution that is scientifically sound and acceptable to stakeholders. Briggs (2006) critiques the roles of policy officers and scientists, challenging both professions to understand and appreciate the different niche each occupies within the conservation arena.

Policy work is usually project-based, and can involve synthesising detailed technical and anecdotal information, often from differing viewpoints, within short timeframes. Generally, several stakeholders will need to be consulted and their views considered. The ability to negotiate and compromise where necessary, are valuable skills.

Exposure to varied and complex issues and the satisfaction of being involved in the development of a solution are some of the benefits of doing policy work. Examples of policy projects I have worked on include writing amendments to the TSC Act, writing guidelines for the survey and impact assessment of threatened species and developing an accreditation scheme for environmental consultants.

Recovery Programs

In addition to policy development, Threatened Species Officers are in the enviable position of being able to coordinate and implement species-specific conservation programs, known as 'recovery programs'. These programs deal with the conservation management of a particular species or community and usually involve several projects operating concurrently, for example undertaking surveys within a national park, research into threatening processes and examining the genetics of the species across its range. As there are about 1000 threatened species currently listed on the TSC Act with each requiring some level of individual attention, there is a real opportunity to get involved with a species, or even a suite of species, and develop expertise in that species.

Recently, the DECC launched the NSW Threatened Species Priorities Action Statement (PAS) (http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/home_PAS_new.aspx).

The PAS lists recovery actions for all threatened species and where these actions should take place. Threatened Species Officers from around NSW compiled the actions and are now working with community groups, local councils, Catchment Management Authorities and universities to implement them.

Through my involvement with the recovery program for the Bush Stone-curlew, I have travelled to many parts of the state to talk to community groups about developing conservation projects for the bird, and learnt an incredible amount from colleagues and landholders regarding the processes which threaten the species and ways to address these.

Recovery programs are always in need of dedicated personnel. Volunteering in a threatened species project in your local area is a good way of learning about the challenges and opportunities involved in threatened species conservation, and may lead to useful contacts within DECC or other land management organisations. Examples of activities which I have participated in include Brush-tailed Rock-Wallaby monitoring at Jenolan Caves, Grey-headed Flying-Fox counts at the Botanic Gardens and numerous Bush Stone-curlew surveys and habitat assessments.

Additionally, Threatened Species Officers often become involved in the development of schemes to mitigate the impacts of an activity on threatened species. Fallen timber is an essential component of Bush Stone-curlew habitat and thus firewood collection can degrade areas used by the species. I had involvement with a scheme to promote sustainable firewood collection being developed by the Commonwealth Government. Similarly, the widespread application of organophosphates during locust plagues was considered a potential threat to Bush Stone-curlews, and DECC negotiated with the relevant authorities to mitigate the impacts of chemicals around nest sites.

Recovery Plans

A tangible example of a threatened species project is the preparation of a recovery plan. Once written, a recovery plan becomes a key reference on a particular threatened species and includes actions to secure the species and conserve it. The recovery plan is used by all concerned organisations, including local councils, Catchment Management Authorities, DECC and environmental consultants, when planning conservation activities and to ensure their actions have negligible impacts on the threatened species. They are also used to direct funding to the highest priority projects.

I was responsible for preparing the NSW recovery plan for an endangered bird, the Bush Stone-curlew (DEC 2006b). During its preparation, I brought together existing information on the species from across Australia and completed a research project on the species to document threats to urban populations. There is now a network of people throughout NSW and south-eastern Australia involved in the implementation of the Bush Stone-curlew recovery plan, and a reference document for people interested in conserving the species in their local area.



A family of Bush Stone-curlews at St Hubert's Island, Gosford, where a local community group is now involved in implementing the recovery plan. Photo courtesy of N. Bennetts (Gosford Council).

My policy experiences as a whole

The Good

As with any job, there are good aspects and not so good aspects of the work. I enjoy the diverse range of projects that I am involved in and working with many different people from various organisations and parts of Australia. The ability to influence government policy, albeit in a very small way, is particularly satisfying and I enjoy working with other like-minded people dedicated to conserving biodiversity. Being integrally involved in on-ground conservation projects is great fun and has allowed me to feel that I am on the way to making a small difference to conservation at some level.

Additionally, in my role I am able to bring science, management and policy activities together. While scientists, managers and policy officers are often criticised for their lack of interaction with one another (Kingsford 2007; Briggs 2006; Roux et al 2006), threatened species conservation will only succeed when there is good communication between all three groups of experts. Being able to foster scientific research through the allocation of funding and then use the information gained to direct conservation management is particularly rewarding.

and the Bad

Unfortunately, working on government policy means that often politics decides outcomes and drives the priorities of the work, rather than conservation or scientific priorities. Riddell (2005) articulates problems with the *Threatened Species Conservation Act* and its focus on procedure rather than effective conservation. Chapple (2005) discusses the influence of community opinions in altering management activities and conservation policies regarding vertebrate pest management. But if you work in conservation, political intervention is simply a fact of life and must be dealt with if working in or with any level of government (Blockstein 2002; Kingsford 2007).

While the pay can be good in comparison to non-government organisations, job security is still scarce until you secure a highly coveted permanent position. Most people spend at least a few years moving between temporary contracts, which can be difficult if you have financial obligations.

What skills are needed?

An ability to write is essential for policy work. Writing needs to be clear, succinct and direct, for instance when expressing a complex issue to senior management in less than a page. Policy work also involves the interpretation of legislation. An understanding of the relevant Acts, how they interact and what they govern is also important.

But in my opinion, a sound knowledge and understanding of conservation biology and some practical experience are the two main credentials for becoming a Threatened Species Officer.

How do you get a job?

Policy officers generally have an Honours degree in science and work experience in the environmental field or a postgraduate qualification. However, work experience can be volunteer-based or drawn from work in a private organisation or another government agency.

Positions are hard to come by so my best advice is to become involved in as many volunteer activities with universities, community groups or conservation organisations as you can. This will allow you to get a working knowledge of conservation issues and how they are managed in a practical setting, as well as build up your network of contacts.

Keep an eye out for jobs on <https://jobs.nsw.gov.au/Start.asp> and don't be too picky about what you initially apply for – no-one gets their dream job first up. Getting a foot in the door in a large organisation like DECC will give you the opportunity to find out how the organisation operates and in which area you might like to work.

A final word

Working with threatened species is challenging and you learn to appreciate the small successes, but it can be extremely rewarding if you are passionate about conservation. If you enjoy applying science to current problems, policy work may be something to consider. The people are always interesting and you will never stop learning. While it can be overwhelming at times, you have the privilege and responsibility of working at the frontline of conservation.

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